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ABSTRACT

Questionnaires completed by 126 instructors of handicapped students in North Dakota were analyzed to examine the use of curriculum materials in special education. Teachers were asked to list at least 10 curriculum materials presently used by the students. Of the 536 materials named, 255 were classified through the use of the Annehurst Curriculum Classification System. Two profiles were created for each material classified: the first describes the material according to learning attribute (experience, intelligence, motivation, emotional/personality, creativity, and social development); and the second according to learning style required to use the material (verbal expression, auditory perception, visual perception, and motor perception). It was concluded that materials in use are low in five of the six learner characteristics, but are more diverse in learning styles. It is suggested that a broader range of use should be made available for teachers experiencing a greater range of abilities within their classrooms. (Tables display data on respondent characteristics, budget information, and material profiles.) A description of the Annehurst Curriculum Classification System is one of three appendixes. (CI)

AN INVESTIGATION OF NORTH DAKOTA'S SPECIAL EDUCATION COMMERCIAL CURRICULUM MATERIAL

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AN INVESTIGATION OF NORTH DAKOTA'S SPECIAL EDUCATION COMMERICAL CURRICULUM MATERIAL

by

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Grand Forks, North Dakota

June, 1981

FOREWORD

The Bureau of Educational Research and Services attempts to publish, periodically, monographs of research conducted by faculty and/or students that is of some current interests to constituencies of educators throughout the state of North Dakota and the nation.

This, the fourteenth to be published since 1976, comes as a result of a survey conducted by Dr. Drew Denton, Assistant Professor of Education at the University of North Dakota, and assisted by Donna Hartman, graduate student in special education. Their investigation centered around special education commercial curriculum material that was being used in classroom throughout North Dakota.

Their findings provide a starting point for educators who work with special learners in assisting to meet the goals and objectives of Individual Educational Plans (IEPs) of students.

Larry L. Smiley, Director
Bureau of Educational Research
and Services

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The author is indebted to the many individuals who contributed to this endeavor. Appreciation is extended to the teachers and supervisors who responded to the questionnaire. A debt of thanks is owed to Richard Landry who assisted with the computer and statistical analysis; and to Debra Schumacher who typed the manuscript. The diversity of need and the limited application of creative engineering in regards to material has motivated this investigation. Hopefully, this work will continue to contribute to the expanding work that is being done to upgrade and refine curriculum materials for handicapped children.

D.D.
D.H.

An Investigation of North Dakota's Special Education Commercial Curriculum Material

Introduction

Current concern regarding educational practices has become widespread as a result of declining test scores and increasing social problems among students at all age levels. In an effort to stem these problems, increased attention has been paid to teacher practices within the classroom. Descriptive strategies have been proposed to fortify the schools in a new effort to reinforce "the basics." Strategies of diagnostic-prescriptive teaching, ability training, direct instruction, competency based education, and other assorted programs have been offered as potential solutions to an increasing crisis within the classroom (Stephens, 1978).

Nowhere is this controversy anymore intense than in the classrooms designed for handicapped students. Political and social pressure has resulted in an abundance of special education programs designed to provide appropriate education practices for disabled learners. Given the mandate of P.L. 94-142, the concern for basics has received renewed strength and political muscle in bringing about a variety of innovative educational practices and strategies to reinforce key learning requirements. The primary tool that is being used in this effort for increased accountability and productiveness is the Individualized Education Program that is being produced for each student that is considered handicapped (Turnbull, 1980). The use of this document has provided for the coordination of regular and special programs, development

of long and short term objectives, time schedules of instruction, current achievement levels, possible related services, and various evaluation practices.

Despite the applause and approval of the professional educational community upon the arrival of such a long overdue document as P.L. 94-142, many practicioners have been duly concerned about the implementation of such intents. They have expressed appropriate concern in regards to the paperwork that is involved with the timely task of creating IEP's. Happily, provisions have been made in many areas to help ameliorate teacher burden. Unfortunately, teacher concerns have continued in regards as to how to meet the goals and objectives that they have stated. Numerous questions have come to the author in the following form from teachers.

1. "We know what it is we want the students to learn (objectives), but what methods and materials will help us to accomplish this?"
2. "What materials and methods should be used with different learning styles?"
3. "Is there any one material or method that will meet most of my needs as a teacher?"

Despite the comprehensive nature of P.L. 94-142, methods and materials for special education instruction were not included as a natural part of the Individualized Educational Program. Teachers, however, are keenly aware of their importance to the educational process. This study will help to address a large portion of their concerns.

Problem

At first glance, the importance of materials and methods might not be universally recognized. Given the importance of the teacher, how/why should methods and materials receive any extended attention? The answer lies in the amount and quality of time that students--as opposed to teachers--interact with materials. Studies by McDonald, Angus, Good and Beckerman (Medley, 1977) suggest that the average time students spend working with materials individually is fifty percent, whereas time spent in verbal interaction with the teacher--discussions, skill, lecturing, and recitation--ranged from only fifteen to thirty percent of the time at the elementary level. Therefore, students spend significant amounts of time interacting with materials. If these materials are not matched to learner needs, possible delays can continue in the development of handicapped students. In addition, it has been shown by Clinefelter and Denton (1978), that materials often dictate instructional methods, and the two must be considered as a whole unit rather than as complete separate entities.

In response to this need, this study was undertaken to help collect and synthesize the extent of commercial curriculum materials for Special Education purposes in North Dakota. A simple listing of materials, however, fails to explore the quality of the individual material and their potential use. As a result, a curriculum evaluation instrument was considered critical to expand and improve upon the informational yield that was available, given the knowledge of what instructional materials were being used.

One such tool that has been proposed to facilitate the matching of student needs with curriculum resources is the

Annehurst Curriculum Classification System (ACCS). Developed in Westerville, Ohio at the Annehurst Elementary School under the direction of Professor Jack Frymier, this device is an instrument for use in classifying instructional resources in terms of individual differences. The general model that has been developed posits ten significant variables that relate to learner characteristics. These ten are:

Learner Characteristics	Learner Style
Experience	Verbal Expression
Motivation	Visual Perception
Creativity	Auditory Perception
Intelligence	Motor Perception
Emotion-Personality	
Social	

It has been assumed that if these factors are the important characteristics of children that affect their learning, then the important thing about curriculum material and other instructional resources is how such materials and resources affect or relate to these same ten learner characteristics. For example, do the curriculum materials exhibit or enhance the creativity of the students who use them? Is the instructional activity appropriate for high or low intelligent children? Are the instructional events motivating or unmotivating? The Annehurst Curriculum Classification System addresses such questions by providing a unique and relevant method of examining curriculum material. The description and explanation of ACCS's particular methods is discussed in Appendix A.

Procedures

Due to geographic and monetary limitations that are often typical of a rural state such as North Dakota, it was determined that a survey questionnaire should be developed and mailed to each teacher employed as an instructor for any of the handicapping conditions. Although State Department of Public Instruction sources list a total of 589 instructors, only 500 names and addresses could be accurately located. Of these 500 questionnaires, a total of 126 were returned for a percentage of 25.

The questionnaire addressed a variety of concerns that would interest instructors in the primary teaching institution within the state. Specifically, information was directed toward the teacher's background, including college attended and the number of years he/she has been teaching in the area of Special Education. Four questions relating to each teacher's present teaching situation were also included. These were: present position, grade level, type of facility, and budget allocations for materials.

The remaining data collected by the 126 surveys pertains to the final request made of recipients regarding commercial curriculum material. The request was to list at least ten curriculum materials presently being used by students. The subject matter area was not limited, therefore the request produced a large variety of materials. The publishers' names of these materials were also requested.

The returned 126 surveys generated an aggregate list of 1138 curriculum materials. Of these materials, 162 of them were duplicated from 1-32 times; for example the material "Sounds Foundations" was mentioned 10 times and "Distar Reading I" was mentioned

32 times. The total number of duplications (602) subtracted from the total number of materials (1138) left 536 different curriculum materials listed on the 126 surveys.

Of these 536 materials, a total of 255 were classified through the use of the Annehurst Curriculum Classification System. Those materials not classified were determined to be out of the current publication process, or teacher made. Of the 255 classified materials, 77 were noted as duplicating from 1-32 times.

The following figure may assist the reader in more closely understanding these procedures.

Figure 1

126 returned surveys

1138 curriculum materials listed

162 materials duplicated from 1-32 times — account for 602 of the listed materials.

536 different materials listed

255 of the 536 materials were classified

117 of the 255 classified materials were duplicated

accounts for 530 materials — 77 materials classified that were listed only once

607 total number of classifications

54% of 1138 originally listed materials were classified

Two profiles were created for each material classified. The first profile described the material in terms of particular attributes that relate to human learning. The second profile described that material in terms of learning style required in order to utilize the material. Appendix A provides an explanation of the

criteria and use. Briefly stated, the two profiles are presented in a particular sequence as follows:

Profile 1	Profile 2
Exp - Experience	VE - Verbal Expression
Int - Intelligence	AP - Auditory Perception
Mot - Motivation	VP - Visual Perception
E-P - Emotion/Personality	MP - Motor Perception
Cre - Creativity	
Soc - Social	

Each profile describes the material in terms of high or low characteristics. An example of the two profiles is shown for two materials.

	Profile 1						Profile 2			
	Exp	Int	Mot	E-P	Cre	Soc	Ve	AP	VP	MP
Material A	1	1	1	1	1	2	1	2	2	1
Material B	2	2	2	2	2	2	2	1	2	1

Key: 2 = High 1 = Low

Reading from left to right, the first profile shows the material as low in all dimensions except social, which indicates a high. The material is best suited for children who exhibit skills of auditory and visual perception. The second example shows the material will require verbal expression and visual perception. The findings of the analysis are reported in the succeeding section followed by discussion and recommendations.

III. Results

The results of the questionnaire are presented in tabular

form together with a brief narrative explaining critical variables. This section is comprised of components, which parallel the parts of the questionnaire concerned with teacher variables and instructional materials. Specifically, these components deal with current positions and grade levels, facilities, budgets, colleges attended, years in education, and commercial curriculum materials used in the classroom.

The data in Table 1 show the representation by handicapping condition of the instructors who responded to the survey. Specific Learning Disabilities constitutes 44 percent of the returned surveys with Educable Mentally Handicapped representing 32 percent. The majority of surveys being returned by educators from within these two areas is not surprising. If the reader will refer to Appendix B the correlation of these two areas can be viewed in comparison to other handicapping conditions classrooms within the state. These two categories employ the majority of special educators within North Dakota.

Table 1

Present Position of Respondents

Position of Respondent	Absolute Frequency	Percentage
Educable Mentally Handicapped	41	32
Specific Learning Disabilities	55	44
Hearing Impaired	1	1
Gifted and Talented	1	1
Multiple Handicapped	4	3
Trainable Mentally Handicapped	14	11
Severe/Profoundly Handicapped	2	2
Emotionally Disturbed	2	2
Visually Impaired	0	0
Preschool Handicapped	6	5
(Total)	126	101*

*Due to rounding the total may or may not always be 100.

In reviewing the collected data pertaining to grade level, a fairly even distribution may be noted among the returns, as displayed in Table 2. This distribution reflects itself in level of material utilized by Special Education classrooms. The representation of a wide range (preschool-12 grade) of materials in the pool will create a more acceptable position when trying to generalize findings to a broad spectrum of classes within the state of North Dakota.

Table 3 data indicates the response rate according to type of facility. Considering the population included in the study, the high percentage of respondents being associated with a public

Table 2

Grade Level of Respondents

Grade Level	Absolute Frequency	Percentage
Preschool	10	8
Primary (1-3)	21	17
Intermediate (4-6)	5	4
Junior High	10	8
High School	18	14
Combination Primary-Intermediate	42	33
Combination Junior Senior-High	6	5
Combination Primary-High School	12	9
No response	2	2
Total	126	100

school system was to be expected. The important consideration here is the inclusion of data from non-public sources.

Table 3

Type of Facility

Facility	Absolute Frequency	Percentage
Public School System	110	87
State School	2	2
Non-Public School	5	4
No Response	9	7
Total	126	100

The data in Table 4 represent the funding base that the teachers have for the purchase of materials. Many respondents answered this particular question with a brief comment rather than an allotted amount of funds. These comments generally stated that funds were dependent upon annual budgets and fluctuated yearly. Others reported that they had no alloted amount with which to purchase materials; however, their requests to administrators for materials were usually met. This seemingly unpredictable funding system may account for the large percentage of those not responding.

Table 4

Budget

Budget (dollars)	Absolute Frequency	Percentage
0-200	41	33
201-400	10	8
401-600	7	5
601-800	2	2
801-1000	0	0
Over 1000	5	4
No Response	61	48
Total	126	100

Table 5 data indicates the higher education institutions represented as attended by the respondents. A total of twelve colleges were listed on the 126 returned surveys; eight are within North Dakota and 14 are out-of-state schools. It is nor sur-

prising that the largest number of educators graduated from the University of North Dakota. UND offers diversified elementary and special education programs and naturally attracts many individuals interested in this field. Minot State College is centrally located, offers an accredited education program, and is a teachers' college, and therefore accounts for the second largest number of graduates.

Table 5

Colleges Attended by Respondents

College Attended	Absolute Frequency	Percentage
University of North Dakota	42	33
Moorhead State University	28	22
Minot State College	29	23
Mayville State College	2	2
Jamestown College	3	2
North Dakota State University	3	2
Concordia Teachers College	3	2
Mary College	2	2
Valley City State College	1	1
Dickinson State College	1	1
Other (out-of-state)	12	10
Total	126	100

The following data, in Table 6, indicates that the majority (76%) of responding special educators within North Dakota have from two to six years of teaching experience. This suggests that the majority of special educators are recent graduates. The ex-

panding role of special education in recent years, due to the enactment of Public Law 94-142, has created a need, as yet unmet, for additional Special Educators. Again, the reader may refer to Appendix B for statistics related to the growing population of students requiring special services. The new influx is reflected in this table.

Table 6

Years Spent Teaching in Special Education

Years Spent Teaching in Special Education	Absolute Frequency	Percentage
2	19	15
3	21	17
4	23	18
5	18	14
6	15	12
7	8	6
8	2	2
9	4	3
10	4	3
11-15	4	3
15-20	5	4
20-27	2	2
No Response	1	1
Total	126	100

Table 7 displays the profiles of 607 pieces of material that were classified according to the Annehurst Curriculum Classifica-

tion System. The largest percentage of materials shows a profile of all lows, with the next highest percentage showing 5 lows and 1 high. These two profiles account for 54 percent of the classified materials. This indicates that the majority of curriculum materials being used with special education children are low in five out of six dimensions in 54 percent of the cases.

Table 7

Material Profile Categories

Number of Materials	Percentage of Materials	Exp	Int	Mot	E-P	Cre	Soc
235	39	1	1	1	1	1	1
90	15	1	1	1	2	1	1
60	10	1	1	2	2	1	2
43	7	1	1	2	2	1	1
43	7	1	1	2	2	2	2
37	6	1	1	1	2	1	2
34	5	1	1	1	1	1	2
30	5	1	1	2	1	1	2
29	5	1	1	2	1	2	1
5	1	1	1	2	2	2	1
606	100						

The data in Table 8 addresses the range of learning styles that the materials exhibit according to the Amherst System. Given the four profiles, a total of 16 different combinations are possible. Inspection of the following table, however, reveals that only eleven were used and that 92 percent of the materials

were represented by only 5 profiles. This indicates that the majority of curriculum materials being used with special education children are somewhat restricted in terms of learning style.

Table 8

Material Profiles of Learning Styles

Number of materials	Percentage of Material	Verbal Expression	Auditory Expression	Visual Perception	Motor Perception
178	29	2	2	2	1
131	22	1	1	2	1
94	15	1	2	2	1
82	14	2	2	2	2
71	12	1	1	2	2
24	4	1	2	2	2
13	2	2	1	2	1
7	1	2	2	1	1
5	-*	2	1	2	2
1	-*	2	1	1	2
1	-*	1	2	1	2
607	99				

*less than 1 percent

Discussion

Although the main focus of this study dealt with common characteristics of special education's curriculum materials, the background research questions occassionally generated interesting data and results. The data recorded in the first three tables con-

cerning position, grade level, and type of facility did not provide any revealing information regarding the degree of dispersion of instructors that was not already known. Its inclusion serves to demonstrate the representativeness obtained from the overall return rate of twenty-five percent. The data suggests that all areas are represented in the pool and that the sample is believed to be generalizable to the larger field of special education.

Information on budget item allocations appear to vary considerably between school districts. The most frequently quoted sums were in the range of 0-200 dollars; however, several stated budgets over $1,000. Although "no response" was obtained on 48 percent of the returns, follow-up contacts and included remarks suggest that these respondents operate on a "request and receive" system. If the need for a particular material arises, the request is usually granted. The overall attitude toward budget provisions was favorable.

The data collected on teachers in regard to the institution where their training was received is particularly noteworthy. Ninety percent of the responding teachers indicated that they had been trained in institutions that are either in North Dakota or Minnesota. This underscores several potential problems regarding education in North Dakota. The greatest percentage of teachers functioning in North Dakota are trained at one institution (University of North Dakota at Grand Forks). This does not allow for extensive diversity in terms of educational background, contrasting styles, and operational options for service delivery. Another key problem alluded to by this statistic is the difficulty experienced by most school districts in recruiting sufficient

educational personnel to handle ongoing needs. Pay shortages, severe winters, and geographic isolation make out-of-state recruitment virtually impossible. For this reason, ongoing development efforts are necessary to update, encourage, and renew personnel.

The overwhelming conclusion from this study is that the commercial materials utilized in special education classes are low in five of the six ACCS Characteristic categories (Profile 1) and that there is only moderate variety in their profiles. That is, out of a potential number of 64 profiles, only 10 different profiles were used. Perhaps some justification may be stated that such low classifications are characteristic of the need in special education classrooms. If, however, the need is to move children from remedial activities to normal activities, then the materials should display an appropriate range that will enable this to occur. Experience and intelligence classification were low for every material examined. Is it possible that commercial materials used in special education classes are all introductory in nature, requiring little or no background of experience to use or understand? The data suggest that this is the case for much of the material in such classes in North Dakota.

Data collected on Learning Styles (Profile 2) indicated that these commercial materials are more diverse in this particular function. That is, a combination of learning approaches could be used to teach the intended content. This diversity was more apparent for Learning Styles than for Learning Characteristics. Continued effort, however, must be exerted to expand the range of alternatives that are available for teaching the content of spec-

ific materials.

Summary

The following points are based upon data received. Recommendations are incorporated for future consideration.

1. The overall attitude of teachers regarding budget allocations for material purchase is very positive. Although no unified amount or system seems to exist in the state, teachers appear to be able to "request and receive" as they experience need.

2. The presence of so many locally trained teachers (trained within the state) is of particular concern for school administration. The lack of diversified training does not create an environment for experimentation with educational innovation. This status quo also points to the state's inability to attract and recruit non-North Dakotans to the State. Salary inducements must begin to offset the hazards of extreme cold and possible isolation if schools hope to attract out-of-state personnel.

3. This need for attraction is further emphasized by the lack of experience that is reflected, overall, for special educators. With 76 percent of the teachers having taught for less than 6 years (50 percent less than 4 years), a real question of program continuity arises. Teachers must be attracted and maintained in order to provide knowledgeable programs for the handicapped.

4. Curriculum materials reviewed show a limited ability to meet the needs of students showing a wide range of learning characterisitics. Materials were generally low in the areas of experience, intelligence, motivation, creativity, and socialization. This suggests that student growth is potentially limited by current curriculums that are offered commercially.

5. The learning styles that the materials exhibit are characterized by being high in auditory and visual perception. Verbal expression and motor perception are not as universal. This suggests that materials are somewhat limited in their application to learning styles. However, learning styles showed a wider usage of material than did the learning characteristics.

Conclusion

The central message of this study is that only a limited number of Learning Characteristics and Learning Styles are being displayed by commercially distributed material. A broader range of use must be made available for teachers who are experiencing a greater range of abilities within their classrooms. Publishers and teachers must begin to evaluate commercial material with a critical eye for its use with classrooms of growing diversity.

APPENDIX A

Instrumentation

The ACCS was used to measure the curriculum material in terms of Learner Characteristics and Learning Profiles. These two sections consist of a listing of words and phrases that describe the high and low ends of ten continuums: (Profile 1) experience, intelligence, motivation, emotional-personality, creativity, and sociability; (Profile 2) verbal expression, auditory perception, visual perception, and motor perception. The high and low descriptors are antonym-pairs and there are 10 to 15 pairs for each dimension. A coder who reviews the material makes a judgement as to whether the high or low descriptors describe the material for each of the ten dimensions. A six-and four-part profile results when the material is classified on all the dimensions.

CURRICULUM CLASSIFICATION

High	EXPERIENCE	Low
special terminology		common vocabulary
provides vicarious experience		provides direct experience
requires special training to use		no special training required
advanced/difficult reading level		simple/beginning reading level
advanced in nature		introductory in nature
representative of reality		original or actual thing
examples and illustrations are complex and difficult to understand		examples and illustrations are simple and understandable

High	EMOTION–PERSONALITY	Low
ambiguous		set and unequivocal
change-oriented		stasis oriented
ego involving or reflects positive sense of self esteem		non-ego involving or reflects negative sense of self esteem
reflects appropriate expression of emotion		reflects inappropriate expression of emotion
decisions controlled by the learner		decisions controlled by others or by chance
requires student to make decisions and abide by the consequences		does not require student to make decisions and abide by the consequences

High	INTELLIGENCE	Low
concept-oriented		fact-oriented
abstract		concrete
intentions implicit		intentions explicit
criteria implicit		criteria explicit
complex organization		simple organization
evokes analysis-type thought		evokes recognition
evokes synthesis-type thought		evokes isolated-type thought
evokes evaluative-type thought		evokes recall

High	CREATIVITY	Low
evokes imagination		evokes imitation
open-ended		closed
versatile		limited
alternative responses possible		restricted responses required
nondirective		directive
interrogative		declarative
unusual		predictable
novel		conventional
does not lend itself to being judged right or wrong		does lend itself to being judged right or wrong

High	MOTIVATION	Low
attractive		plain
stimulating		calming
evocative		routine
examples provocative		examples lacking or not provocative
marked contrast		contrast not evident
compelling		bland
unique		ordinary
complex		simple or uniform
immediate feedback		feedback not available
activity-oriented		passivity-oriented

High	SOCIAL	Low
respects individuality		stereotypical
reflects positive concern for people who are different		reflects negative concern for people who are different
reflects sensitivity to people		lacks sensitivity to people
reflects positive concern for people and things		reflects negative concern for people and things
nonprejudicial		prejudicial
fosters interpersonal skills		no interpersonal skills required

LEARNING STYLES

High VERBAL EXPRESSION (SPEECH) Low	
(Appropriate)	(Does not Apply)
requires expanded verbal response	requires simple yes-no verbal response
requires sequencing of spoken terms	does not require sequencing of spoken terms
requires categorizing	does not require categorizing
requires differentiation of opposites	does not require differentiation of opposites
requires discrimination of parts and wholes	does not require discrimination of parts and wholes
requires discrimination of singular and plural forms	does not require discrimination of singular and plural forms
emphasizes rhythm of language	does not emphasize rhythm of language

High VISUAL PERCEPTION Low	
(Appropriate)	(Does not Apply)
requires the student to identify visual similarities and differences	does not require the student to identify visual similarities and differences
requires the student to organize, reproduce, and remember a sequence of visual stimuli	does not require the student to organize, reproduce, and remember a sequence of visual stimuli
requires finding a specific object against a crowded visual environment or background	does not require finding a specific object against a visual environment or background
requires the student to differentiate right-left, front-back, near-far, top-bottom, and comparable characteristics of visual stimuli	does not require the student to differentiate right-left, front-back, near-far, top-bottom, and comparable characteristics of visual stimuli

High AUDITORY PERCEPTION Low	
(Appropriate)	(Does not Apply)
requires organizing, reproducing, or sequencing of sounds and words	does not require organizing, reproducing, or sequencing of sounds and words
requires identifying auditory similarities	does not require identifying auditory similarities
requires identifying auditory differences	does not require identifying auditory differences
auditory directions required	auditory directions not required
requires identifying specific sounds	does not require identifying specific sounds
requires learning rhymes, songs, and finger plays	does not require learning rhymes, songs, and finger plays

High MOTOR PERCEPTION Low	
(Appropriate)	(Does not Apply)
requires body balance	does not require body balance
requires locomotor activity involves body parts	does not require locomotor activity does not involve body parts
requires imitative movements	does not require imitative movements
requires fine motor coordination	does not require fine motor coordination
requires using body parts of one or both sides of the body	does not require using body parts of one or both sides of the body
requires hand and arm movements past the midline of the body while head and body are stationary	does not require hand and arm movements past the midline of the body while head and body are stationary

APPENDIX B

SPECIAL EDUCATION IN NORTH DAKOTA

	1958-1959		1959-1960		1960-1961		1961-1962		1962-1963		1963-1964	
	Teacher/Ch		Teacher/Ch		Teacher/Ch		Teacher/Ch		Teacher/Ch		Teacher/Ch	
Educable Mentally Handicapped	23	260	37	421	35	435	43	495	47	550	53	616
Trainable Mentally Handicapped												
Speech/Language	31	3274	33	3181	34	3287	34	3414	34	3486	42	3783
Specific Learning Disabilities												
Evaluation/Testing	3	174		370	2	499	2	385	2	409	7	115
Preschool												
Hearing Impaired												
Visually Impaired		30		33		21	1	32	1	27	2	29
Physically Handicapped		19										
Gifted/Talented												
Homebound		86		98		100				97		114
Emotionally Disturbed												
Total Student Units of Service		3419		4124		4415		4486		4466		5296
		$154,708		$159,580		$172,823		$186,339		$195,542		$238,150

SPECIAL EDUCATION IN NORTH DAKOTA--CONTINUED

1964-1965		1965-1966		1966-1967		1967-1968		1968-1969		1969-1970		1970-1971		1971-1972	
Teacher	Ch	Teacher	Ch	Teacher	Ch	Teacher	Ch	Teacher	Ch	Teacher	Ch	Teacher	Ch	Teacher	Ch
64	761	72	873	92	977	83	1061	98	1072	99	1092	110	1160	112	1243
		1	6	2	17	3	34	6	38	8	58	11	77	9	76
43	3896	50	4513	52	4030	56	4356	55	4108	62	4404	71	4333	84	4769
						8	154	12	408	30	762	41	998	41	783
5	848	5	1164	15	1094	9	958	10	709	10	1256	10	1023	10	1343
1	10	1	15	1	19	1	12	1	13	1	20	1	10	1	15
2	22	2	22	2	30	2	43	2	40	2	48	2	53	2	35
										1	7	1	11	1	15
				1	10	1	40								
	114		133		182		135		191		214		196		205
		5	144	9	182	4	75	11	96	11	120	11	113	12	126
	5625		6870		6550		7129		6877		8072		8055		8891
	$254,319		$310,764		$358,952		$442,788		$468,977		$531,183		$541,122		$670,848

SPECIAL EDUCATION IN NORTH DAKOTA--Continued

1972-1973		1973-1974		1974-1975		1975-1976		1976-1977		1977-1978		1978-1979	
Teacher/Ch		Teacher/Ch		Teacher/Ch		Teacher/Ch		Teacher/Ch		Teacher/Ch		Teacher/Ch	
120	1204	132	1450	141	1458	143	1672	150	1498	155	1540	160	1406
14	114	22	177	27	196	39	196	40	319	49	349	45	375
92	4759	98	4894	116	4990	134	5734	142	5408	145	5365	145	5402
48	1118	72	2008	95	2994	128	3659	127	3157	149	3143	155	3316
11	1085	11	1365	3	198	10	1377	11	1447	5	1040	13	2386
								22	251	33	431	31	440
3	32	4	23	3	29	4	31	9	101	8	78	12	115
2	50	2	54	2	52	2	77	2	15	2	28	3	46
1	12	1	10	1	13	2	21		22		25	3	58
						2	110	4	148	5	244	4	309
	135		178		169		219		222		274		203
12	108	7	104	7	922	8	104	16	339	11	131	18	214
	9415		10644		11643		13542		13301		15435		
	$753,871		$1,239,948		$1,591,795		$3,262,606		$3,997,715		$4,646,156		$6,046,164

APPENDIX C

SPECIAL EDUCATION CURRICULUM SURVEY

The following survey is intended to collect information regarding the commercial curriculum materials that you buy and use. It is understood that these materials may be used in a wide variety of ways. Our desire, however, is simply to know what commercial materials you consider to be useful. We realize that it is impossible for you to inventory your entire room. Would it be possible for you to identify the ten materials and publishers that you find most useful in your instruction of students? These may be spread through several different content areas (e.g. math, reading, spelling, literature, etc.) or concentrated in a single content area. Please share with us the years of your experience and the commercial materials that you find beneficial for your students. Our sincere thanks for your time and attention.

Name_____
(optional)

Present Position:

_____Educable Mentally Handicapped
_____Specific Learning Disabilities
_____Hearing Impaired
_____Gifted and Talented
_____Multiply Handicapped
_____Trainable Mentally Handicapped
_____Severe/Profoundly Handicapped
_____Emotionally Disturbed
_____Visually Impaired
_____Preschool Handicapped

Grade Level:

_____Preschool
_____Primary (grades 1-3)
_____Intermediate (grades 4-6)
_____Junior High
_____High School

Facility:

_____Public School System
_____State School
_____Non-public School

What is your yearly budget/allocation for materials for students? _____

From what college did you graduate? _____

How long have you been in Special Education?_____

Please use the back of this page for listing your curriculum materials.

Please list at least 10 commercial curriculum materials that you are presently using with your students.

SUBJECT MATTER AREA	NAME OF MATERIAL	PUBLISHER

SELECTED REFERENCES

Medley, D.M., Teacher Competence and Teacher Effectiveness: A Review of Process Product Research (Washington, D.C.: American Association of Colleges for Teacher Education, 1977), p. 70.

Frymier, Jack, Annehurst Curriculum Classification System: A Practical Way to Individualize Instruction. Kappa Delta Pi Press, 1977.

Stephens, Thomas M., Carol Hartman and Virginia Lucas, Teaching Children Basic Skills, Charles Merrill Publishing Co., 1978.

Clinefelter, David and Drew A. Denton. "The Annehurst Curriculum Classification System: Insight and Inquiry into the Use of Curriculum Material and Affective Teaching." Paper presented at the First Congress of Education for the Canadian Schools trustee Association, Toronto, Canada, June, 1978.

Turnbull, Ann, Bonnie Stricklan and John Brantlry, Developing and Implementing Individualized Education Program, Charles Merrill Publishing Co. 1978.

Other reports available from the Bureau of Educational Research and Services

No 1, June, 1976, "Expectations for the Role of Superintendent of Schools," by Mark S Sanford and Donald L Piper, $1 50

No 2, June, 1976, "The Development of a Three Digit Occupational-Personality Holland Code for Male Secondary School Principals in North Dakota," by Barbara E Ochiltree $1 00

No 3, July, 1976 "Teacher Needs in North Dakota 1976-1981," by Larry L Smiley and Sylvia E Stites, $1 50

No 4 September, 1976 "An Examination of the Utility and Validity of the Learning Disabilities Construct," by Walter S Mabee, $1 00

No 5, September 1976 "Morale and Professional Activities in Selected Small North Dakota Schools," by Quinn Brunson, $1 50

No 6 November 1976, "Saving Money Through Group Bidding by North Dakota School Districts" by Daniel R. O'Shea and Donald L. Piper, $1 50

No 7 April, 1977 "Effects of Supervision on Teacher Attitudes Towards Self-improvement" by Larry Hoiberg and Donald K Lemon, $1 50

No 8, August, 1977, "An Analysis of the Use of Math Manipulative Materials in North Dakota," by Ronald Kutz, $1 50

No 9 June 1978, "Multi-Dimensional Screening Device (MDSD) for the Identification of Gifted Talented Children," by Bella Kranz, $1 50

No 10 January, 1979, "An Assessment of the Need for Sex Education for the Mentally Retarded in North Dakota," by Beverly Brekke, $1.50

No 11 April, 1979, "Expectations for the Role of Cooperative Special Education Director," by Robert R. Duncan and Richard L. Hill, $1.50

No 12, April, 1980, "Policies on Staff Reduction Due to Declining Enrollment in North Dakota Schools," by Donald D Ost and Donald K Lemon, $1 50

No 13, June, 1980, "The Effect of Negotiations on the Relationships Between the Administration and the Instructional Staff of a School District," by John J Vorachek and Larry L Smiley

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